

and separating carbon dioxide in the produced gas by bringing the produced gas into contact with alkaline absorption solution, before said carbon monoxide adsorption step

5. (Amended) A hydrogen production method by gasification of combustibles according to claim 1, further comprising a carbon dioxide adsorption step for adsorbing and separating carbon dioxide in the produced gas by bringing the produced gas into contact with carbon dioxide adsorbent, before said carbon monoxide adsorption step.

6. (Amended) A hydrogen production method by gasification of combustibles according to claim 1, further comprising a hydrogen purifying step using hydrogen-absorbing alloy for separating nitrogen and argon in the produced gas and pressurizing hydrogen gas, after said carbon monoxide adsorption step.

7. (Amended) A power generation method by gasification of combustibles for generating electricity by supplying hydrogen gas produced by the method according to claim 1 to a fuel cell.

8. (Amended) A power generation method by gasification of combustibles according to claim 7, wherein said hydrogen production method further comprises a hydrogen purifying step using hydrogen-absorbing alloy for separating nitrogen and argon in the produced gas and pressurizing hydrogen gas, after said carbon monoxide adsorption step, and wherein exhaust heat recovered by the cooling of said fuel cell is utilized as a heat source for hydrogen desorption in said hydrogen-absorbing alloy.

9. (Amended) A power generation method by gasification of combustibles according to claim 7, wherein said fuel cell used in said fuel cell power generation step comprises a polymer electrolyte fuel cell or a phosphoric acid fuel cell.

13 (Amended) A hydrogen production apparatus by gasification of combustibles according to claim 10, further comprising a carbon dioxide absorption tower provided upstream of said carbon monoxide adsorption tower for absorbing and separating carbon dioxide in the produced gas by bringing the produced gas into contact with alkaline absorption solution.

14 (Amended) A hydrogen production apparatus by gasification of combustibles according to claim 10, further comprising a carbon dioxide adsorption tower provided upstream of said carbon monoxide adsorption tower for adsorbing and separating carbon dioxide in the produced gas by bringing the produced gas into contact with carbon dioxide adsorbent.

15 (Amended) A hydrogen production apparatus by gasification of combustibles according to claim 10, further comprising an alloy accommodating container packed with hydrogen-absorbing alloy provided downstream of said carbon monoxide adsorption tower for separating nitrogen and argon in the produced gas and pressurizing hydrogen gas.

16 (Amended) A power generation system by gasification of combustibles for generating electricity by supplying hydrogen gas produced by the apparatus according to claim 10 to a fuel cell

17 (Amended) A power generation system by gasification of combustibles according to claim 16, wherein said hydrogen production apparatus further comprises an alloy accommodating container packed with hydrogen-absorbing alloy provided downstream of said carbon monoxide adsorption tower for separating nitrogen and argon in the produced gas and pressurizing hydrogen gas, and wherein exhaust heat recovered by the cooling of said fuel cell is utilized as a heat source for hydrogen desorption in said hydrogen-absorbing alloy